LAVENDER CREEK TMDL IMPLEMENTATION PLAN

NARRATIVE PLAN

Lavender Creek was listed on Georgia's 303 (d) due to a sample collected 10-28-92 by an employee of JEM Laboratories in Rome, Georgia. JEM Laboratories was under contract to collect monthly samples for Oglethorpe Power during construction of the Rock Mountain Power Plant. Fecal coliform in the sample was measured at 9,200 cfu/100 ml which exceeds the one-time standard of 4,000 cfu/100 ml. The sample was collected near Boggs Lake, which is accessible on Sand Springs Road near the headwaters of Lavender Creek. Of 77 samples collected over a sixteen-year period, this was the only sample to exceed the one-time standard; however, the standard for the 30-day geometric mean may have been exceeded if samples had been collected to substantiate it.

Personnel from Coosa Valley Regional Development Center led the effort to develop this TMDL implementation plan in cooperation with employees of Rome and Floyd County. Following a preplanning session on January 17, 2001, a public meeting was held on January 30, 2001 at the Armuchee Elementary School library. The school is one of the closest public facilities to the Lavender Creek watershed. Forty-five people registered for the meeting including representatives of local, state, and federal government, landowners, livestock operators, homeowners, Coosa River Basin Initiative, and news media. The meeting involved information dissemination and information gathering.

After viewing the film "Watershed Wisdom: Georgia's TMDL Program" and a Powerpoint presentation on TMDL's in the U.S., Georgia, and Lavender Creek, attendees participated in a brainstorming session. The session revolved around two questions. What things should be done to stop or reduce fecal coliform pollution? How should the plan be implemented? After collecting and summarizing ideas the participants ranked them in terms of importance. Using a dot method, each participant had ten "votes". A red dot equaled four votes, blue equaled three, green equaled two, and yellow equaled one.

The most important item was to get a monitoring program in place. Second in importance was a "how to" item stating that monitoring should happen first, then voluntary measures, then regulatory measures. Installation and maintenance of stream buffers ranked third. The fourth ranked item was identify and quantify land use, followed by stricter enforcement of existing regulations, assuring water sampling accuracy, clearing debris and beaver dams and regulation consistency throughout government, and others (see attached).

A second meeting was held at Armuchee Elementary School on February 12, 2001 to review a final draft of the plan. About 31 people attended. Following a presentation on BMP's for agriculture, forestry, and residential land uses, the final draft TMDL

Implementation Plan was reviewed. A lot of discussion ensued, but no recommendations for changes in the plan resulted.

Given the professional opinions of the planners involved, the input of other professionals, and input of landowners in the watershed and other members of the public, we are recommending a step-wise approach. The first component of this approach is a monitoring program (see attached Monitoring Plan). The second component is increased activity from Natural Resources Conservation Service (NRCS) and Cooperative Extension Service (CES) in the agriculture sector emphasizing voluntary installation of BMP's such as stream buffers, particularly through the use of cost-share programs. The third component is increased educational activity from CES in regard to maintenance of septic systems, and from the Environmental Health Department in educating the public on current regulations for septic systems.

It is hoped that the resulting voluntary compliance will result in fecal coliform counts low enough to de-list Lavender Creek. If voluntary compliance is not sufficient, then the second phase will be regulatory with mandatory stream buffers and stringent enforcement of the septic tank code. This phase will also involve working cooperatively with Berry College and DNR-Wildlife Resources Division to reduce wildlife numbers on the Berry College WMA.

STATE OF GEORGIA

| TMDL IMPLEMENTATION PLAN | I FOR: <u>Lavender Creek</u> <u>I</u> | ecal Col | | RIVER E | BASIN: _ | Coosa | | |
|---|---------------------------------------|----------|----------------|----------------|-----------------------|--------------|-------------|---|
| | (STREAM) | | AMETER) | PLAN DAT | E: <u>N</u> | /larch 2, 20 | 001 | |
| Prepared by: Coosa Valley | | Or Prep | ared By: | | | | | |
| | egional Development Center | | | | | | | |
| Address: P.O. Box 1793 | | Address | S: | | | | | |
| City:_Rome | State: <u>Georgia</u> | City: | | | | State: _ | | <u> </u> |
| City: Rome Zip: 30162 e-mail: gl | nuber@cvrdc.org | Zip: | | e-mail: | | | | |
| Date Submitted to EPD: <u>March</u> | <u>2, 2001</u> | Date Su | ibmitted to EF | PD: | | | | |
| THIS PLAN WAS UPDATED | WITH 604(B) FUNDS | | | | | | | |
| IN 2003 | | | | | | | | |
| General Info | rmation | | | Significa | ant Stake | holders | | |
| Obtain this information from the TMD When completed, this document vindependent of the TMDL document. | vill be a self-contained report | commerc | | nizations, bus | inesses a | and indus | stries, and | ant land holders, local organizations dy. |
| TMDL ID (to be entered by EPD) | CSA0000002 | Name/C | Organization | Floyd Cour | ity Com | mission | ers | |
| Water body name | Lavender Creek | Address | 3 | 3 Governm | ent Plaz | a | | |
| HUC basin name | Coosa River | City | Rome | | State | GA | Zip | 30162 |
| HUC number | 03150103 | Phone | (706)291-51 | | | | e-mail | |
| Primary county | Floyd County | Name/C | Organization | | | | ntal Healt | h Department |
| Secondary county | | Address | 3 | 315 West | 10 th Stre | eet | | |
| Primary RDC | Coosa Valley | City | Rome | | State | GA | Zip | 30162 |
| Secondary RDC | | Phone | (706)295-63 | 316 | | | e-mail | |
| Water body location | From: Sand Springs Road | Name/C | Organization | Floyd Cou | inty Wat | er Depa | artment | |
| | To: Armuchee Creek | Address | 3 | 217 Calho | un Aver | nue | | |
| Miles or area impacted | 6771 Acres | City | Rome | | State | GA | Zip | 30161 |
| Parameter addressed in plan | Fecal Coliform | Phone | (706)291-51 | 72 | | | e-mail | |
| Water use classification | Fishing | Name/C | Organization | Floyd Cou | inty Sch | ools | | |
| Degree of impairment | Partially supporting use x | Address | 3 | 600 Rivers | side Par | kway | | |
| | Not supporting use | City | Rome | | State | | Zip | 30161 |
| Date TMDL approved by EPA | | Phone | 234-1031 | astewart@ |)floydbo | e.net | e-mail | |
| Impairment due to | Point sources | Name/C | Organization | Oglethorp | | | | |
| | Nonpoint sources x | Address | | 4050 Big | | | | |
| | Both | City | Rome | | State | GA | Zip | 30165 |
| Point source-Form A; Nonpoint source | ce-Form B; Both-Form A+B+C | Phone | (706)290-54 | 00 | | | e-mail | |

If more, add to comments on last page.

FORM B

SUMMARY OF ALLOCATION MODEL RESULTS FROM TMDL DOCUMENT (existing load, target TMDL, and needed reduction)

| EXISTING LOAD | TARGET TMDL | NEEDED REDUCTION |
|---------------|---------------|------------------|
| 164 cfu/100ml | 150 cfu/100ml | 14 cfu/100ml |
| | | |

I. IDENTIFY **NONPOINT SOURCE** CATEGORIES AND SUBCATEGORIES OR INDIVIDUAL SOURCES WHICH MUST BE CONTROLLED TO IMPLEMENT LOAD ALLOCATIONS:

List major nonpoint sources contributing to impairment including those identified in TMDL document.

| SOURCE | DESCRIPTION OF CONTRIBUTION TO IMPAIRMENT | RECOMMENDED LOAD REDUCTION (FROM TMDL) |
|----------------------------|---|--|
| Forest pervious | Nonpoint Berry College Wildlife Management Area (about 2,000 acres) | |
| Agricultural pervious | Nonpoint | 10% |
| Urban-residential pervious | Nonpoint - failing septic tanks, wildlife, and pets | 50% |
| Urban impervious | Nonpoint - storm water runoff | |
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II. DESCRIBE ANY REGULATORY OR VOLUNTARY ACTIONS INCLUDING MANAGEMENT MEASURES OR OTHER CONTROLS BY GOVERNMENTS OR INDIVIDUALS THAT SPECIFICALLY APPLY TO THE POLLUTANT AND THE WATERBODY FOR WHICH THE TMDL WAS WRITTEN, THAT WILL BE ACCOMPLISHED THROUGH RELIABLE AND EFFECTIVE DELIVERY MECHANISMS, AND THAT WILL HELP ACHIEVE THE LOAD ALLOCATIONS IN THE TMDL:

See the attachment for more instructions.

Existing or required regulatory actions

| RESPONSIBLE GOVERNMENT, ORGANIZATION OR ENTITY | NAME OF REGULATION/ORDINANCE | DESCRIPTION | ENACTED OR PROJECTED DATE (mm/yy) | STATUS |
|---|---|---|--|--|
| Floyd County | Rome/Floyd Unified Code | Buffer Ordinance | Dec-98 | Enforced on new development |
| Floyd County Health Dept., EHD | Rules and regulations for on-site sewage mgt. | Septic System Code | Jan-98 | Enforced, State regs. Adopted by the Board of Health |
| Floyd County | Protection of Natural Waters | Section 6.19.1 b (2) Buffers | March-01 | Pending |
| Floyd County | Phase II: Stormwater Permit | Apply for permit and develop management program | 10/03/03 | EPD will notify |
| | | | | |
| | | | | |

Existing voluntary actions

| RESPONSIBLE ORGANIZATION OR ENTITY | NAME OF ACTION | DESCRIPTION | ENACTED OR PROJECTED DATE (mm/yy) | STATUS |
|---|--|---|--|---|
| Farm Services Agency | Conservation Reserve Program | Continuous sign-up for buffers | 1985 | Excellent program for ag producers |
| Natural Resources Conservation Service | Environmental Quality Incentives Program | State Priority Items | 1997 | Yearly sign- up for ag producers |
| Natural Resources Conservation Service | Wetland Reserve Program | On-going wetland restoration program | 1985 | Has not been useful in NW Georgia |
| Floyd County | Floyd County Green Space Program | Permanent easement purchase to preserve green space | Mar- 01 | New program |
| Floyd County | Adopt-A-Stream | Stream Monitoring and clean-up | | Not on Lavender Creek at this time |
| Georgia EPD/Coosa Valley RDC | Source Water Assessment Program | Inventory and risk assessment for water supply watersheds | Nov-03 | In progress |
| | | | | |

Additional recommended regulatory or other measures which should be implemented to reduce the loads of the TMDL parameter

| ENTITY/ORGANIZATION RESPONSIBLE | NAME OF PROPOSED REGULATION/ORDINANCE/ OTHER | DESCRIPTION | ENACTED OR PROJECTED DATE (mm/yy) | STATUS |
|---------------------------------|--|---|-----------------------------------|-----------|
| Floyd County | TMDL buffers | Special regulations for buffers along 303(d) listed streams | 2006 | If needed |
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III. SCHEDULE FOR IMPLEMENTING MANAGEMENT MEASURES OR OTHER CONTROL ACTIONS:

These must be implemented as expeditiously as practicable within five years of when the implementation plan is accepted by EPA.

| IMPLEMENTATION ACTION | YEAR 1 | YEAR 2 | YEAR 3 | YEAR 4 | YEAR 5 |
|--|--------|--------|--------|--------|--------|
| Form stakeholders group | Χ | | | | |
| Organize implementation work with stakeholders and local officials to | Χ | | | | |
| identify remedial measures and potential funding sources | | | | | |
| Identify sources of TMDL parameter | Χ | | | | |
| Develop management programs to control runoff including | Χ | | | | |
| identification and implementation of BMPs | | | | | |
| (Phase I): Agriculture | | | | | |
| Forestry | X | | | | |
| Urban | Χ | | | | |
| Mining | | | | | |
| Organize and implement education and outreach programs | Χ | | | | |
| Detect and eliminate illicit discharges | Χ | | | | |
| Evaluate additional management controls needed | Χ | Χ | X | | |
| Monitor and evaluate results | X | Χ | Х | Х | X |
| Reassess TMDL allocations | | | X | | X |
| Provide periodic status reports on implementation of remedial activities | Х | Χ | Х | Х | X |
| If needed, begin process for Phase II (next 5 years) and subsequent | | | | | X |
| phases | | | | | |

IV. PROJECTED ATTAINMENT DATE AND BASIS FOR THAT PROJECTION:

The projected attainment date is 10 years from acceptance of the implementation plan by EPA.

| V. MEASURABLE MILESTC |) [| IES: |
|-----------------------|------------|------|
|-----------------------|------------|------|

| - Number of management controls and activities already implemented | <u> </u> |
|--|---------------------------------|
| - Number of management controls and activities proposed in five-year work program | 6 |
| - Number of management controls and activities actually implemented in five-year work period | (to be completed after 5 years) |
| - Stream sampled to identify areas of concern | See monitoring plan |
| - Other | |
| - Other | |

VI. MONITORING PLAN:

Monitoring data that placed stream on 303(d) list will be provided if requested.

Describe previous or current sampling activities or other surveys to detect sources or to measure effectiveness of management measures or other controls.

| ORGANIZATION | TIME FRAME | PARAMETERS | PURPOSE | STATUS |
|-------------------------------|------------|----------------|-----------------------------------|--------|
| Floyd County Water Department | Bi-weekly | Fecal Coliform | Source locations, verification of | begun |
| | | | status, and progress monitoring | |
| Rome Water Department | | | Analysis at Blacks Bluff | Begun |
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| ORGANIZATION | TIME FRAME | PARAMETERS | PURPOSE | STATUS |
|---|-----------------------------------|----------------|----------------|---------------|
| EPD | 2001-2002 | Various | Basin planning | '01 collectio |
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| % concentration or load change Categorical change in classification Regulatory controls or activities | tion of the stream (delisting t | • , |) | |
| - Best management practices ins | talled (agricultural, forestry, ι | urban) | | |
| COMMENTS See attached additional stakehol | ders, Narrative Plan, and Mo | nitoring Plan. | | |
| | | | | |

LAVENDER CREEK TMDL IMPLENTATION PLAN

MONITORING PLAN

Personnel from Floyd County Water Department will collect samples from 6 locations along Lavender Creek on a bi-weekly schedule. The samples will be analyzed at the City of Rome Water and Sewer Department laboratory at Blacks Bluff. Samples will be collected and analyzed using protocols from CFR 40 part 136 for fecal coliform.

Two samples will be collected each week rotating through the sample locations. So each location will be sampled every six weeks. Sample locations (map attached) have been located to best determine loads from differing land uses and to establish background levels for fecal coliform. Signs have been erected at the sample locations. The sites are numbered 1 through 5. Sample locations may be changed if sample data indicates that another location might yield more useful information.

The Environmental Planner for the Rome/Floyd Planning Department will maintain data from the collections. These data will be printed in the Roman Record of the Rome News-Tribune on a regular basis.